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## ABSTRACT

This sixth volume in the fourth series of general bibliographies produced by the Science and Mathematics Education Information Analysis Center updates, but does not replace, previous bibliographies in this series. Documents which contain resource materials for teachers of elementary, secondary, and college science, and which have been indexed or abstracted at the Center, are listed in the following categories: Elementary Education, with subdivisions of Science and Health Education; Secondary Education, with Biological Sciences and Health Education; Physical and Earth Sciences, Mathematics, and General subdivisions; College Science, categorized as Biological Sciences, Physical and Earth Sciences, and Mathematics; and General (containing documents pertinent to more than one educational level) with the same subdivisions as the secondary section. There is an author index. Each citation includes author, title, publisher or journal citation, SE identification number, and, for documents announced in Research in Education, the ED identification number and availability information. Descriptors and identifiers used in indexing are included for each document listed. Documents cited include teachers guides, laboratory exercises, "teacher tips" and accounts of educational practice. (AL)

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May, 1970

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\*BIBLIOGRAPHIES, \*EARTH SCIENCE, \*FILING, \*INDEXES (LOCATORS), \*INFORMATION  
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\*ELEMENTARY SCHOOL MATHEMATICS, \*GEOMETRIC CONCEPTS, \*LEARNING ACTIVITIES, ARITHMETIC, MATHEMATICS, TEACHING TECHNIQUES
5. SE 500 085  
GURAU, PETER K.  
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02 00 69 3  
\*ELEMENTARY SCHOOL MATHEMATICS, \*FUNDAMENTAL CONCEPTS, \*INSTRUCTION, \*MATHEMATICAL CONCEPTS, \*NUMBER CONCEPTS, ARITHMETIC, GRADE 1, KINDERGARTEN
6. SE 500 469  
HIGGINS, JON L.  
SUGAR-CUBE MATHEMATICS  
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10 00 69 5  
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7. SE 500 093  
HOLDAN, GREGORY  
PRIME - A DRILL IN THE RECOGNITION OF PRIME AND COMPOSITE NUMBERS  
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02 00 69 3  
\*ELEMENTARY SCHOOL MATHEMATICS, \*NUMBER CONCEPTS, \*TEACHING PROCEDURES,  
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8. SE 500 307  
JUNGE, CHARLOTTE W.  
DOTS, PLOTS AND PROFILES  
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05 00 69 8  
\*ARITHMETIC, \*ELEMENTARY SCHOOL MATHEMATICS, \*GRAPHS, \*INSTRUCTION, AUDIOVISUAL  
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9. SE 500 843  
KOPP, AUDREY; HAMADA, ROBERT  
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11 00 69 3  
\*ARITHMETIC, \*CLASSROOM TECHNIQUES, \*ELEMENTARY SCHOOL MATHEMATICS, \*LEARNING  
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10. SE 500 481  
LIEDTKE, WERNER  
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10 00 69 3  
\*ELEMENTARY SCHOOL MATHEMATICS, \*GRAPHS, \*GEOMETRIC CONCEPTS, \*INSTRUCTION,  
\*TEACHING TECHNIQUES, NUMBER CONCEPTS
11. SE 500 844  
MATHISON, SALLY  
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11 00 69 3  
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\*PROBLEM SOLVING, NUMBER CONCEPTS, TEACHING TECHNIQUES
12. SE 500 092  
MILNE, ESTHER  
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MCLANE, LYN  
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\*INSTRUCTION, INSTRUCTIONAL MATERIALS, \*PROBABILITY, RESOURCE MATERIALS,  
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14. SE 500 090  
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\*AUDIOVISUAL AIDS, \*ELEMENTARY SCHOOL MATHEMATICS, \*INSTRUCTIONAL MATERIALS,  
\*MULTIPLICATION, ARITHMETIC, INSTRUCTION, MATHEMATICS
15. SE 500 474  
OGLETREE, EARL  
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07 00 67 104  
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\*MATHEMATICS EDUCATION, \*TERMINOLOGY, CONCEPTS, FUNDAMENTAL CONCEPTS, GEOMETRY,  
GUIDELINES, MATHEMATICS, VOCABULARY, PENNSYLVANIA RETRIEVAL OF INFORMATION  
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 PINCUS, MORRIS  
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 RASOF, ELVIN  
 THE FUNDAMENTAL PRINCIPLE OF COUNTING, TREE DIAGRAMS, AND THE NUMBER OF  
 DIVISORS OF A NUMBER (THE NU-FUNCTION)  
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21. SE 500 473  
 STRAIN, LUCILLE B.  
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22. SE 500 478  
 TEEGARDEN, DONALD O.  
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 NUMBERS  
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1. SE 500 068  
ALLEN, DOROTHEA  
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01 00 69 6  
\*BIOLOGY, \*CYTOLOGY, \*INSTRUCTION, \*LABORATORY TECHNIQUES, \*SECONDARY SCHOOL  
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2. SE 500 376  
BROWN, ROBERT E.  
DETECTION AND ANALYSIS OF AIR AND WATER POLLUTANTS  
THE AMERICAN BIOLOGY TEACHER  
05 00 69 3  
\*NATURAL RESOURCES, \*POLLUTION, \*SCIENCE ACTIVITIES, INSTRUCTION, RESOURCE  
MATERIALS, SECONDARY SCHOOL SCIENCE, WORLD PROBLEMS
3. SE 006 545  
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ED 028 940 MF \$0.50 HC \$4.60  
64 90  
\*DISEASES, \*HEALTH EDUCATION, \*SECONDARY SCHOOL SCIENCE, \*TEACHING GUIDES,  
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4. SE 007 402  
COLE, JAMES E.  
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SCHOOL SCIENCE AND MATHEMATICS  
04 00 63 7  
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BIOLOGY, MICROBIOLOGY, SCIENCE ACTIVITIES, TEACHING GUIDES
5. SE 006 103  
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10 00 68 61  
\*BOTANY, \*INSTRUCTIONAL MATERIALS, \*PHYSIOLOGY, \*SECONDARY SCHOOL SCIENCE,  
\*SCIENCE ACTIVITIES, BIOLOGY, EVALUATION, TESTS, TEACHING GUIDES, EDUCATIONAL  
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6. SE 500 141  
DIESNER, RICHARD H.  
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\*SCIENCE EXPERIMENTS, BIOCHEMISTRY, PLANT GROWTH, SCIENCE ACTIVITIES
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10. SE 500 446  
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13. SE 500 046  
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14. SE 500 380  
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\*BIOLOGY, \*CHROMATOGRAPHY, \*SCIENCE ACTIVITIES, INSTRUCTION, LABORATORY  
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LOUGHLIN, L. R.  
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16. SE 500 789  
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18. SE 500 250  
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21. SE 500 199  
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22. SE 500 072  
VOGEL, LUTHER H.  
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1. SE 500 140  
AMEND, JOHN R.  
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\*ASTRONOMY, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE, \*SCIENCE EQUIPMENT, PHYSICAL SCIENCES, SCIENCE EXPERIMENTS, SCIENCE ACTIVITIES
2. SE 007 080  
ARCHENHOLD, W. F.  
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\*ELECTRICITY, \*INTERNATIONAL EDUCATION, \*MAGNETISM, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE, ELECTROMAGNETISM, LABORATORY EXPERIMENTS, SCIENCE ACTIVITIES, SCIENCE MATERIALS
3. SE 500 405  
CHESLEY, ROBERT E.  
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\*PHYSICAL SCIENCES, \*SCIENCE ACTIVITIES, AEROSPACE TECHNOLOGY, PHYSICS, SECONDARY SCHOOL SCIENCE
4. SE 004 214  
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5. SE 006 271  
DEAN, C. THOMAS  
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7. SE 006 619  
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10. SE 500 271  
FISHER, MERLE  
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FRANKLIN, WILLIAM R.  
THE PSYCHEDELIC STUDENT-GETTER  
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12. SE 500 020  
GOTTLIEB, HERBERT H.  
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13. SE 006 752  
GRAHAM, MILDRED W.  
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14. SE 006 374  
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15. SE 500 107  
KANE, JULIAN  
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18. SE 007 078  
 RICHMOND, P. E.  
 THE PELTIER EFFECT  
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 09 00 66           9  
 \*HEAT PUMPS, \*PHYSICS, \*SCIENCE APPLICATIONS, \*SECONDARY SCHOOL SCIENCE,  
 \*TECHNOLOGY, ENGINEERING, INTERNATIONAL EDUCATION, SCIENCE PROJECTS, REGNAULT'S  
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 SIEGEL, RICHARD S.  
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 \*ELECTRICITY, \*PHYSICAL SCIENCES, \*PHYSICS, \*SECONDARY SCHOOL SCIENCE,  
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20. SE 500 366  
 TIPTON, CARL K.  
 GRAPHITE REACTOR: NUCLEAR LANDMARK OPENED TO PUBLIC  
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 04 00 69           2  
 \*FIELD TRIPS, \*NUCLEAR PHYSICS, \*PHYSICS, \*PHYSICAL SCIENCES,  
 \*SCIENCE FACILITIES, SECONDARY SCHOOL SCIENCE, SCIENCE ACTIVITIES, OAK RIDGE  
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21. SE 006 472  
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